WHAT IS CLAIMED IS:

1. An apparatus for optical system coherence testing comprising a transparent plate, wherein said transparent plate is made to be opaque on a surface in all areas except for an area of a pattern, wherein said pattern comprises two elongated areas, wherein said two elongated areas have a width of a dimension that would cause coherent light from the optical system to diffract upon transmitting through said area of said pattern, wherein said two elongated areas are joined at a common point, and wherein said two elongated areas diverge from said common point to form an angle.

2. The apparatus of Claim 1, wherein an interior of said two elongated areas includes a diffraction grating pattern.

3. The apparatus of Claim 2, wherein said diffraction grating pattern is arranged to diffract light in a horizontal direction.

4. The apparatus of Claim 2, wherein said diffraction grating pattern is arranged to diffract light in a vertical direction.

5. The apparatus of Claim 2, wherein said diffraction grating pattern is arranged to diffract light in both a horizontal and a vertical direction.

6. The apparatus of Claim 2, further comprising a second diffraction grating pattern, wherein said diffraction grating pattern has a first measure of pitch and wherein said second diffraction grating pattern has a second measure of pitch.

7. The apparatus of Claim 6, wherein said diffraction grating pattern with said first measure of pitch is located within an interior of a first of said two elongated areas and wherein said second diffraction grating pattern with said

second measure of pitch is located within an interior of a second of said two elongated areas.

8. The apparatus of Claim 1, further comprising a second width, wherein a first of said two elongated areas has said width and wherein a second of said two elongated areas has said second width.

9. The apparatus of Claim 1, wherein said two elongated areas have a straight shape.

10. The apparatus of Claim 1, wherein said two elongated areas have a curved shape.

11. The apparatus of Claim 1, wherein said two elongated areas are aligned symmetrically with respect to an orientation of light from the optical system.

12. The apparatus of Claim 1, wherein said two elongated areas are aligned asymmetrically with respect to an orientation of light from the optical system.

13. The apparatus of Claim 1, wherein said pattern is repeated at other locations on said transparent plate.

14. The apparatus of Claim 1, wherein said pattern further comprises another two elongated areas, wherein said four elongated areas form a diamond shape.

15. The apparatus of Claim 1, wherein the apparatus is a reticle.

16. The apparatus of Claim 15, further comprising a spacing device attached to a surface of said reticle.

17. The apparatus of Claim 16, wherein said spacing device is a piezoelectric spacer.

18. The apparatus of Claim 16, wherein said spacing device is a transmissive crystal.

19. The apparatus of Claim 18, wherein said transmissive crystal is wedge-shaped.

20. The apparatus of Claim 18, wherein said transmissive crystal is piezoelectric.

21. The apparatus of Claim 16, further comprising a recording medium attached to an opposite surface of said spacing device.

22. The apparatus of Claim 21, wherein said recording medium is photographic.

23. The apparatus of Claim 21, wherein said recording medium is electronic.

24. The apparatus of Claim 21, further comprising a phosphorus film placed between said recording medium and said spacing device.

25. The apparatus of Claim 21, wherein the apparatus is mounted within a tube, wherein said tube is designed to replace a section of tube in the optical system.

26. The apparatus of Claim 21, further comprising a demodulator reticle attached between said spacing device and said recording medium.

27. The apparatus of Claim 26, further comprising a phosphorus film placed between said recording medium and said demodulator reticle.

28. The apparatus of Claim 26, wherein the apparatus is mounted within a tube, wherein said tube is designed to replace a section of tube in the optical system.

29. The apparatus of Claim 16, further comprising a demodulator reticle attached to an opposite surface of said spacing device.

30. The apparatus of Claim 29, further comprising a phosphorus film placed between said recording medium and said demodulator reticle.

31. The apparatus of Claim 29, wherein the apparatus is mounted within a tube, wherein said tube is designed to replace a section of tube in the optical system.

32. A method for optical system coherence testing, comprising the steps of:

a. in an optical system, aligning a light source with an apparatus designed for optical system coherence testing and with a means to observe interference patterns;

b. transmitting light through the apparatus designed for optical system coherence testing; and

c. observing interference patterns from said transmitted light with the means to observe interference patterns.

33. The method of Claim 32, wherein said aligning provides that light incident upon the apparatus designed for optical system coherence testing is at a non-perpendicular angle.

34. The method of Claim 32, wherein said aligning provides that light incident upon the means to observe interference patterns is at a non-perpendicular angle.

35. The method of Claim 34, wherein said aligning is provided by a wedge-shaped transmissive crystal.

36. The method of Claim 34, wherein said aligning is provided by a transmissive piezoelectric crystal.

37. The method of Claim 34, wherein said aligning is provided by a piezoelectric spacer.

38. The method of Claim 32, wherein the apparatus designed for optical system coherence testing tests for spatial coherence.

39. The method of Claim 38, wherein the apparatus designed for optical system coherence testing tests for horizontal spatial coherence.

40. The method of Claim 38, wherein the apparatus designed for optical system coherence testing tests for vertical spatial coherence.

41. The method of Claim 38, wherein the apparatus designed for optical system coherence testing tests for both horizontal and vertical spatial coherence.

42. The method of Claim 32, wherein the apparatus designed for optical system coherence testing tests for temporal (longitudinal) coherence.

43. The method of Claim 32, wherein the apparatus designed for optical system coherence testing is designed to minimizes the extent of disassembly of the optical system.

44. The method of Claim 32, wherein the means to observe interference patterns is a recording medium.

45. The method of Claim 44, wherein the recording medium is photographic.

46. The method of Claim 44, wherein the recording medium is electronic.

47. The method of Claim 32, wherein the means to observe interference patterns is visual observation facilitated by a demodulator reticle.